

# Sacramento Valley Field Crops Newsletter, Winter 2014



## A new year and a new farm advisor in Colusa-Sutter-Yuba

Hello, I'm Mark Lundy, a new Agronomy Advisor in Colusa-Sutter-Yuba, based out of the Colusa office. With 2014 underway, I wanted to send out a brief note to introduce myself and give a brief sketch of some of the work I've initiated since I began in July of 2013.

*Where are you from?*

I'm from Arizona originally, but I'm starting my 9<sup>th</sup> year living here in California. For most of that time I've lived in or around Davis where I was a graduate student for 6 years and earned an MS in International Agricultural Development and a PhD in Horticulture and Agronomy. Prior to graduate school I worked on a fruit and vegetable farm in the Capay Valley as well as farms in Arizona, Michigan and Ireland.

*What crops will you be covering?*

Everything but rice and trees. As someone in the office put it: "Around here rice is Snow White, and Mark works on the seven dwarfs." So that would be tomatoes, alfalfa, wheat, sunflower, corn, beans, fruit and veg. crops, etc. (I guess that's more than 7). My graduate research focused on soil fertility and weed management in rice systems. While I'm familiar with many of the crops I'm advising on, I still have a lot to learn about all of them. I'm looking forward to doing that with all of you!

*What are you working on right now?*

Wheat is the first crop that went in the ground since I started, and I have a few experiments running (a couple on some pretty dry fields!). I am testing some simple, low-cost tools that measure soil and plant fertility on-the-spot and in-the-field. Some of these are commercial products that are relatively new; some have been recently developed at the university or by other public entities. The goal is to be able to tell whether an in-season application of N would be beneficial in terms of yield and/or protein. I think that some combination of plant and soil sampling at key points in the season could be good predictors of whether and how much N to apply to achieve a yield or protein goal. I'm also hopeful that some of these same tools could be calibrated to some of the other crops that I'll be working on. With increasing regulation of N coming at the state level, equipping growers and consultants with simple, low-cost tools and methods that demonstrate when N is or is not needed is a priority for me. I'll be reporting back on which tools or combinations of tools are showing promise as soon as I start to figure it out. If you have experience using in-field diagnostic tools or are interested in learning more about this, please contact me. I'd love to meet interested folks to collaborate on this work. Also, if you're web-



inclined, there are more details about this on my blog (<http://ucanr.edu/blogs/SacValleyFieldCrops/>), and I'll be updating the progress of this work most frequently on the web.

*Where can I find you?*

At the Colusa office (100 Sunrise Blvd., Suite E, Colusa, CA 95932), on my phone (530-902-7295), or on the web via email ([melundy@ucanr.edu](mailto:melundy@ucanr.edu)), at the Colusa Extension site (<http://cecolusa.ucanr.edu/>), and at my blog (<http://ucanr.edu/blogs/SacValleyFieldCrops/>). I've enjoyed meeting many good folks over the past 6 months. If I haven't had the chance to meet you, please give me a call, stop me at a meeting, shoot me an email, or drop in some time. I'm looking forward to working with you and for you to continue the great agricultural tradition in the Sacramento Valley.

## A brief pest note:

The **brown marmorated stink bug** is a serious agricultural and residential pest that was identified in our region this past fall. It feeds on fruiting parts of plants and **has caused serious damage to** various cropping systems, including **tomatoes**, in the Pacific Northwest as well as on the East Coast. Be on the lookout for it, and contact us if you are seeing it. I have included an informational flier produced by UC IPM as the final page of this Newsletter for your reference.

## Upcoming Events:

On **January 30<sup>th</sup> from 9 to 10:30AM** at Granzella's Banquet Hall (457 7<sup>th</sup> Street, Williams, CA) there will a **mandatory** special meeting for members of the **Colusa Glenn Subwatershed Program** located in the Lower Colusa Basin Drain above Knight's Landing Represented Drainage Area (Sycamore Area; Buckeye Creek; Bird Creek; Smith Creek; Breton Creek; Oat Creek-Colusa; College City Area; Meridian Edge; West Canal Landing) who grow alfalfa and/or walnuts and/or use Malathion. **100% participation** in the special meeting titled Management Practices Implementation and Performance Goals: Malathion in Lower Colusa Basin Drain and completion of an associated survey are **required for compliance**. For more information contact Colusa Glenn Subwatershed Program office at **(530) 934-8036** or [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net).

UC IPM is hosting a Pesticide Safety Training: Train the Trainer workshop in Woodland on **2/19**. There will also be a refresher course on **2/18** for those who have had previous training. For more information contact Maria Alfaro at **(530)750-1252**; [malfaro@ucdavis.edu](mailto:malfaro@ucdavis.edu) or see the UC ANR Calendar announcements at <http://ucanr.edu/Calendar/>.

You can help stop a new pest by recognizing and reporting it.

# Brown Marmorated Stink Bug

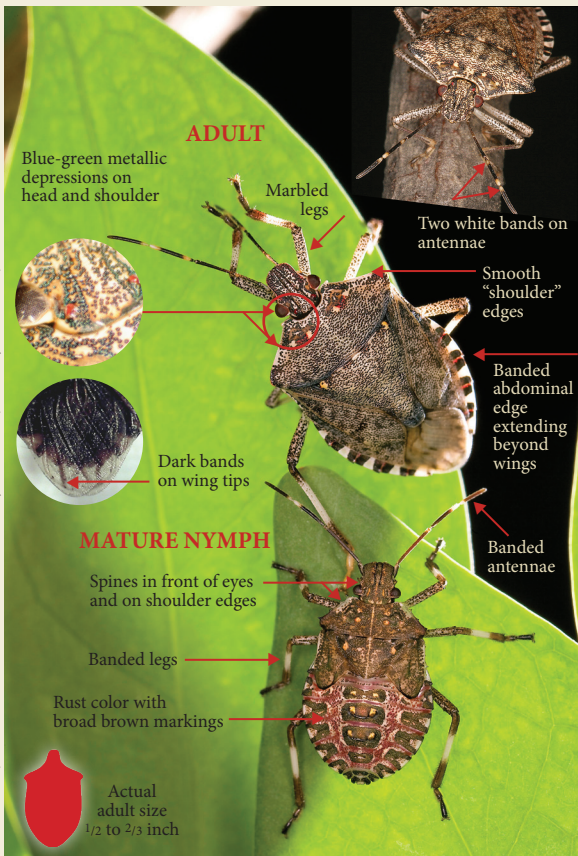
The brown marmorated stink bug (BMSB), *Halyomorpha halys*, has been detected in California. Wherever BMSB takes up residence, it **causes severe crop and garden losses** and becomes a **nuisance to people**. The ability of BMSB to hitchhike in vehicles and planes has allowed it to **spread rapidly** to new areas. Since it was introduced to the United States from Asia in the 1990s, BMSB has become established in the mid-Atlantic States as well as in Portland, Ore., and Los Angeles.

## How to identify BMSB



**EGGS** Laid in clusters of 20 to 30 on underside of leaves, barrel-shaped, white to pale green

**YOUNG NYMPHS** Abdomen orange with brown markings



## Similar stink bugs (also known as shield bugs)

BMSB adults look similar to other brown stink bugs. Here are some tips for telling adults apart.



**RED SHOULDERED STINK BUG**  
Edge of abdomen concealed; antennal bands, if present, are not white; less than 1/2 inch long



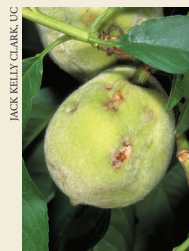
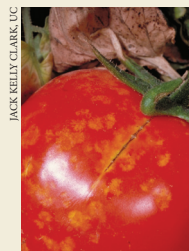
**ROUGH STINK BUG** Distinctive teeth jutting out from shoulder; no antenna bands; 2/3 inch long



**CONSPERSE STINK BUG** Legs dotted with dark spots; no antenna bands; 1/2 inch long

## Impact of BMSB on crops and people

**CROP DAMAGE** BMSB may reach very high numbers, and since one bug can feed on many fruit, losses can be severe. Adults and nymphs suck juices from fruit and seeds, creating pockmarks and distortions that make fruit and vegetables unmarketable. Damaged flesh under the skin turns hard and pithy. BMSB damages fruits (e.g., apple, pear, citrus, stone fruits, and fig), berries, grapes, legumes, vegetables, and shade trees.



BMSB damage to tomato (left), peach (center), and pear (right)

**NUISANCE TO PEOPLE** BMSB seeks winter shelter, and large numbers may congregate on outside walls or invade homes by entering through small openings. It is also a pest in home gardens. These insects stink when disturbed.

## How it spreads

BMSB **travels long distances** by hitching rides in vehicles or as stowaways when furniture or other articles are moved, often during winter months. As a result, most new infestations are found in urban areas.

## Report any sightings

If you find a stink bug that you suspect might be a BMSB, place it in a container and carefully note where and when you collected it. Take the sealed container to your county agricultural commissioner or local UC Cooperative Extension office.

For more information, visit [www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu).

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*Meeting announcements and newsletters are also available at our website: <http://cecolusa.ucdavis.edu>*

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*Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318*

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