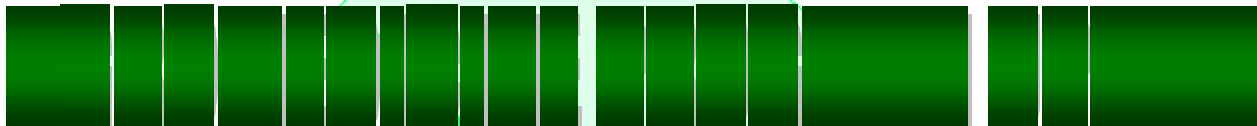


# The Newsletter of the Clemson University / MUSC Agromedicine Program



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## **PROGRAM NOTES**

> Thank you for your continued interest in the SC Agromedicine Program!

Please keep us in mind as you plan your programs for this fall and winter.

New topics of interest which are available on request include: "Flu—Avian or Not?" "Mistletoe & Holly—Plant Safety for the Holidays" and "MRSA—What's True, What's Hype?"

A full listing of presentations is available on request from the SC Agromedicine Program office.

>Dr. Schuman's book- **Rainbows in Washtubs** – has been published in both paperback and hardbound editions. It is available through Amazon.com (at a discount!). Dr. Schuman will present a copy of the book to the Clemson University Library in December.

>Dr. Frithsen's article on over diagnosis of brown recluse spider bites was chosen by Medscape as a feature selection for their daily email to family physicians around the world via the

web. Dr. Frithsen's co-authors were Ian Stocks of Clemson's Department of Entomology and Rick Vetter of the University of California at Riverside.

## **RECENT CONSULTS**

>Consults in the last month have focused on insects and skin and soft tissue infections.

**Urticating caterpillars** have been active in the lower state in recent weeks with several calls regarding exposure to "Puss caterpillars" and their stings.

We have a power point presentation on stinging caterpillars and would be happy to share the material with anyone who is interested.

**Skin and soft tissue infections** have also been the reason for questions in the clinic about possible insect bites or stings as the cause of the original break in the skin. In this, and most other parts of the country, very painful cellulitis and necrotic skin infections (other than those associ-

ated with pressure ulcerations) are likely due to secondary infection with MRSA rather than a result of the insect bite or sting itself. Drain and culture collections of pus when possible.

## **FROM THE LITERATURE**

### **>MRSA**

As a follow-up to the consults above, hospitalizations for MRSA nearly tripled between 2000 and 2005 in the US. (128,000 to 368,000). The report did not distinguish between hospital and community acquired infections, so it is not clear whether the growth of infections is a failure of prevention in hospitals or growth in community-acquired infections.

-AHRQ. Infections with Methicillin-resistant Staphylococcus Aureus in US Hospitals, 1993-2005. (<http://www.hcup-us.ahrq.gov/reports/statbriefs/sb35.pdf>)

### **>"Chronic Lyme Disease"**

Authorities including Allen Steere, Gary Wormser and Henry Feder have published a review article in the New England Journal of Medicine's Current Concepts series which "critically appraises" the concept of

chronic Lyme disease. It is an excellent review of the literature with thoughtful advice to clinicians regarding care of patients who think they have “chronic Lyme.”

-Feder HM, Johnson BJ, O'Connell S et al. N Engl J Med 2007;357:1422-30.

### >Pet-Related Infections

“Human contact with cats, dogs, and other pets results in several million infections each year in the United States, ranging from self-limited skin conditions to life-threatening systemic illnesses.” So begins the lead article in the most recent issue of American Family Physician. A physician and two veterinarians from Yale outline common pet-related infections, provide a two-page “overview” of domestic pet-related infections, a list of internet-based information sources and extensive references

-Rabinowitz PM, Gordon Z, Odofin L. Am Fam Physician 2007; 76:1314-22.

### >VOC's and Pesticides in Drinking Water

Two articles in recent editions of Environmental Health Perspectives deal with the occurrence of volatile organic compounds and pesticides in domestic wells and surface drinking-water supplies respectively. BL Rowe and colleagues with the US Geological Survey sampled more than 2400 domestic wells over a 17 year period from 1985-2002. Samples were taken at the wellhead prior to any local treatment. VOC's were detected in 65% of the samples more than half had

more than one VOC. Approximately 1% of samples had one VOC above the EPA maximum contaminant level (MCL). Samples with high VOC levels were concentrated in the New York-Washington corridor and central California.

Editor's note: This is a reassuring rather than alarming study. Only 1% with VOC's above the EPA MCL in samples drawn before any treatment—and from up to 22 years ago—when environmental release restrictions were significantly less strict.

-Rowe BL, Toccalino PL, Moran MJ et al. Environ Health Perspect 2007;115:1539-46.

Water from 15 reservoirs in the Great Plains of North America were sampled throughout the growing season and drinking water was sampled in the middle of the most active pesticide application time period.

Two insecticides and 27 herbicides were detected in reservoir water. Water treatment removed 14-86% of individual herbicides and all of the insecticides.

Their conclusions: “We detected a variety of pesticides at nanogram-per liter levels. (Editor's note: unless my math is incorrect, this is a part per trillion) in reservoirs that supply drinking water to small communities in the northern Great Plains. Water treatment reduced pesticide concentrations, but depending on the location, 3-15 herbicides (no insecticides) remained in drinking water. Total con-

centrations of all pesticides generally were well below guidelines for individual pesticides. No guidelines have been established for pesticide mixtures. “ One herbicide (MCPA) reached nearly 50% of the guideline level for drinking water, but the remainder were 20 to 1000 times lower than the guideline level. Herbicide reduction was highly variable from one treatment site to another. Membrane filtration appeared to be the most effective treatment method for removal of herbicides.

Editor's note: Even in the Great Plains with intensive crop culture, pesticide residues in drinking water are tiny or non-existent.

-Donald DB, Cessna AJ, Sverko E, Glozier NE. Environ Health Perspect 2007;115:1183-91.

Copies of all “From the Literature” articles are available on request.

### More on Well Water

A permit must be issued to drill a private well for water for human consumption. As a part of the process, an inspection is required to insure that the well is constructed properly. After the initial inspection which includes evaluation for coliform bacteria in the water, no further testing is required. Additional testing is available and based on specific elements of concern. Further information: <http://www.scdhec.net/environment/water/dwrwtest-ing.htm>