



AMERICAN CHEMICAL SOCIETY KENTUCKY LAKE SECTION

March 2011 Kentucky Lake Section Meeting

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Perkins Restaurant

Milan, TN

Thursday, March 24, 2011

Social @ 5:30, Dinner @ 6:00, Presentation @ 7:00

*Perkins Restaurant is located near Wal-Mart at
15301 South 1st Street, Milan, TN 38358*

The price is \$10 (Students \$5)

Menu – Choice of:

Grilled Chicken Breast (Lemon Pepper, Cajun, or Plain)

Sliced Roast Beef

Pork Chops (Lemon Pepper, Cajun, or Plain)

Vegetable Plate (Includes Three Dinner Sides)

All dinners will include two dinner sides, roll, and a beverage.

Presentation:

Discovery of Pesticides from Natural Products

By

Stephen Duke

Univ. of Mississippi

U.S. Dept of Agriculture-Agriculture Research Service

See Reverse Side for Abstract & Biographical Sketch

Comments from the Chair

T-shirt Time! If you have a cool design you would like to see on a KLS t-shirt, please email your design to Robbie or Kate. Once designs have been received they will be posted on the KLS Facebook page for voting. The winning designer will get a free t-shirt! Also, the section has been granted a mini grant to host an ACS leadership course. The course is tentatively scheduled for Saturday September 10th or 17th, and will be located in Martin. So, please keep these dates open as the course is a great experience for all members and will serve to benefit our section. Hope to see you soon!

Robbie Montgomery

KLS-ACS 2011 Officers

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UTM
rmontgomery@utm.edu

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UTM
kstumpo@utm.edu

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MSU
Harry.fannin@murraystate.edu

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USEC
montgomeryjb@pgdp.usec.com

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cbaldwin@uu.edu

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MSU
Jeff.anderson@murraystate.edu

KLS-ACS Web Page

<http://kentuckylake.sites.acs.org/>

Abstract

Discovery of Pesticides from Natural Products

Some of the most successful pesticides arose from knowledge of the biological activity of natural compounds. These include the pyrethroid insecticides, strobilurin fungicides, and triketone herbicides. The advantages and disadvantages of natural product-based discovery efforts will be discussed. This presentation will focus on the discovery processes that our research group uses in efforts to find natural compounds with potential pesticidal activity. Examples of compounds discovered using strategies including those based on ethnobotany, chemical ecology, biological activity unrelated to pests, and chemical structure clues will be discussed, as well as simply evaluating natural compounds with no hint as to what activity they might have. This presentation will walk the listener through a wide range of chemical structures with interesting biological properties.

Brief Biographical Sketch

Dr. Duke received his B.S. degree in Biology from Henderson College in 1966, his M.S. in Botany from the University of Arkansas in 1968, and his Ph.D. in Botany from Duke University in 1975. Dr. Duke has worked at the U.S. Department of Agriculture in various capacities since 1975. He is currently a Research Leader of the Natural Products Utilization Research Unit in Oxford, Mississippi.

