



*ARS International
Research
Seminar Series*

Seminar

Tuesday, November 7, 2006 ♦ 1:00 p.m. – 2:30 p.m.
GWCC ♦ 5601 Sunnyside Ave, Bldg. Beltsville, MD 20705
Conference Room 4-1255/1125

Dr. David Marshall
Research Leader & Professor
USDA/ARS - Plant Science Research Unit

“International Screening to Global Plant Pathogens”

Dr. David Marshall is a Research Leader at the USDA-Agricultural Research Service (ARS), Plant Science Research Unit, in Raleigh, NC. In his capacity, Dr. Marshall serves as the Lead Scientist on the USDA/ARS project “Improvement and Genotyping of Cereal Germplasm and Epidemiology of Cereal Diseases” which includes stem rust. Dr. Marshall has a Ph.D. in Plant Pathology, from Purdue University, West Lafayette, Indiana.

The USDA/ARS had a long history of leading the way in the screening and evaluation of plant germplasm for resistance to diseases. In particular, wheat, barley, and oat germplasm was routinely screened for reaction to rust diseases throughout the world, beginning in the late 1940s. Much of the information that came out of these screening nurseries was used as the basis for genetic studies on the plants and their rust pathogens. Subsequently, from the 1950s through 1970s, these nurseries served as a reservoir for sources of rust resistance that breeders and geneticists could use to develop new cultivars for production. International Research Centers such as CIMMYT also planned and coordinated their own screening nurseries in addition to those originating in the U.S. However, beginning in the early 1980s and continuing through the present day, much of the previous emphasis placed on International screening nurseries had lost favor. With the advent of wheat stem rust race Ug99 in East Africa, and our lack of information on how wheat germplasm would react to the race, resulted in a global awakening among wheat researchers as to the need to have International screening nurseries, particularly in light of a “forgotten” disease such as wheat stem rust.

Dr. Marshall will discuss the International Screening Nurseries and the ARS role, particularly with regard to the wheat stem rust UG99 and the GRI.



(Presentation includes Question and Discussion Time)
Please RSVP to Shannon Lee at 301-504-4526, fax: 301-504-4528, or email: Shannon.lee@ars.usda.gov
5601 Sunnyside Ave, Bldg. 4-1139, Beltsville, MD 20705