Position: Graduate research assistantship (M.S./Ph.D.) positions are available in Agronomy, Entomology, Soil Science, or Ecology.

Available: Spring or Fall, 2015.

Project Description: We are seeking graduate students to participate in a multi-disciplinary, sustainable cropping systems project focused on developing alternative approaches for integrating cover crops and reduced tillage practices in an organic feed and forage system. Our overall goal is to develop pest (weed and insect) and soil management practices that overcome current reduced-tillage production constraints in organic grain systems in the Mid-Atlantic region. Project activities will include on-station and on-farm research and extension. In addition to field-based research, there will be opportunities to: 1) develop and deliver extension programs on organic agriculture, and 2) participate in the development of a web-based decision support tool for organic growers.

Assistantship Focus Areas: 1) Entomology (Ph.D) – Evaluate effects of cover crop and reduced-tillage strategies on early season insect pests, key beneficial organisms, and soil-borne insect pathogens; 2) Agronomy (Ph.D/M.S.) – Evaluate effects of cover crop and reduced-tillage strategies on cover crop and cash crop performance, and weed management; 3) Nutrient Cycling (Ph.D/M.S.) – Evaluate effects of cover crop and reduced-tillage strategies on nutrient supply and retention dynamics; 4) Cropping Systems Modeling (Ph.D) – Utilize research to apply and improve a cropping system model focused on nutrient cycling and management in cover crop based, reduced-tillage organic grain systems. Integration among student projects encouraged.

Qualifications: B.S. or M.S. degree in plant or soil science, entomology, biological sciences, environmental sciences, ecology, or other agriculture-related discipline. Strong written and oral communication skills necessary. Minimum 3.0 GPA. GRE test scores are required.

Salary and benefits: Competitive with tuition waiver and health care benefits.

Location: The Penn State University Park Campus is located in State College in Central Pennsylvania. State College is a community of approximately 40,000 year round residents along with 40,000 university students in the heart of the Allegheny Mountains. The geographic setting is one of fertile agricultural valleys situated between tree-covered ridges. Agriculture is Pennsylvania's number one industry.

For additional information contact (by focus area): Entomology: Dr. Mary Barbercheck, email: meb34@psu.edu and phone: (814) 863-2982 Agronomy: Dr. Bill Curran, email: wcurran@psu.edu and phone: (814) 863-1014 Nutrient Cycling: Dr. Jason Kaye, email: jpk12@psu.edu and phone: (814) 863-1614 Cropping Systems Modeling: Dr. Armen R. Kemanian, email: akemanian@psu.edu, phone: (814) 963-9852

Application Submission: Send letter of interest, resume, and transcripts to:
Project Manager: Dr. John Wallace, email: jmw309@psu.edu and phone: (814) 863-4309