

**Camelia G.-A. Maier**  
**Department of Biology**  
**Sept 9, 2005**

Education:

- Ph.D. 1996 University of North Texas, molecular biology (dissertation entitled “Phytoestrogens in two dioecious species: isolation, characterization and role in plant reproduction”)
- M.S. 1992 University of North Texas, biology (thesis entitled “Screening of steroids from plants using *Saccharomyces cerevisiae* as a host system”)
- B.S. 1980 University of Bucharest, Romania, biology (thesis entitled “The effect of culture conditions on the ploidy level of tobacco calli obtained by anther cultures”)

Prior Academic Employment and Employment at TWU:

Date of employment, title & rank:

1996-1999, Postdoctoral Fellow, The Noble Foundation, Ardmore, Oklahoma

Promotion through ranks with dates (TWU & other institutions)

1999-2004, Assistant Professor, tenure track, TWU

Sept 2005, Associate Professor with tenure, TWU

Teaching:

Undergraduate Courses: Bot. 2113, Plant Biology; Biol. 4223, Ecology; Biol. 1022, Environmental Biology

Graduate Courses

Spring 2000 – Bioc. 6650, Plant Biochemistry and Physiology, Federation of North Texas Universities, team-taught at UNT

Summer 2000 – Biol. 5903, Plant Environmental Biology (developed the course)

Fall 2001 – Biol. 5903, Plant Physiological Ecology (developed the course)

Spring 2004 – Biol. 6903, Plant Ecophysiology

Include the number of dissertations & theses directed at TWU: 5 MS theses

Research/Scholarship:

Main research interest - Estrogen compounds in plants (phytoestrogens). The search for phytoestrogens and their possible functions in plant reproduction was approached by choosing a specific molecular screening technique, the estrogen-responsive transcriptional system in yeast (*Saccharomyces cerevisiae*). A variety of cellular, biochemical, physiological, molecular and genetic approaches are further employed, at the microscopic and organism levels to understand the role of these compounds in plant reproduction. Research topics include: the isolation and characterization of phytoestrogens from different plant species; the involvement of phytoestrogens in plant development and sexual reproduction and/or reproductive ecology; search for plant endogenous receptors responsive to phytoestrogens; estrogens in dietary plants and food products; medical applications of phytoestrogens as possible antiestrogens for the prevention and therapy of breast cancer and other cancers; sexual dimorphism and reproductive ecology of dioecious plants in the mulberry family (have sexes separate in male trees and female trees)

Other research interests: plant epicuticular wax deposition and functions; plant mineral depositions and functions; reproduction of transgenic cotton plants for yield increase; carnivorous plants

Professional Service:

Curator for the TWU Herbarium (since 2003)

Editor for the *Texas Journal of Microscopy* (peer-reviewed journal) (since 2000)

Member of the Molecular Biology Symposium Committee for the Federation of North Texas Area Universities (since 1999)

Member in ASPB (American Society of Plant Biologists), BSA (Botanical Society of America), Sigma Xi, TSM (Texas Society for Microscopy), and OMS (Oklahoma Microscopy Society)

Reviewer for scientific journals, National Science Foundation, and the United States-Israel Binational Agricultural Research and Development Fund (BARD) (2003-2004)