



## Marcia Croft

Marcia grew up in Seattle, WA before attending Kalamazoo College for her bachelor's degree in biology and music. After her undergraduate degree, she moved to Thailand where she discovered a passion for agricultural development while working for a seed bank on the Thai-Burma border. Since joining Ecological Sciences and Engineering Interdisciplinary Graduate Program at Purdue University, she has spent over a year in Kenya on her research and recently completed an internship at the American Embassy in Bogota, Colombia, studying the value chain for cacao in post-conflict regions. After graduation, she plans to work in international agricultural development on building agricultural resilience through agrobiodiversity. Outside of her research, she enjoys growing food, cooking, eating, yoga, and music.

# The Role of African Leafy Vegetables in Food Security

**September 30, 2016**

**10:00 AM HORT Room 222**

African Leafy Vegetables (ALVs) are a diverse set of crops grown across sub-Saharan Africa. They have been a staple of traditional diets and contain many critical micronutrients but their importance has been ignored at the expense of imported crops. Availability, accessibility, and utilization of ALVs are limited by factors across the supply chain, and this research investigated seed systems, drought tolerance, hydroponic production, market barriers, consumer preference, and the impact of gender. We found that ALVs play an important role in food security and that critical differences exist between formal and informal sectors. Women play a stronger role in informal sectors, but the balance between the formal and informal markets is changing, and this may jeopardize the incomes of many women. The determinants of household security were different for male- and female-headed households, and each group can be vulnerable to food insecurity in different ways. Market barriers differed for formal and informal ALV retailers but consumer preference for quality did not, suggesting that investment in postharvest handling may allow ALV growers to capture greater value. We also showed that ALV germplasm is diverse, offering both a wide range of species with different agronomic characteristics and important differences in drought tolerance among accessions. Crop- and location-specific factors impacted farmer adoption of seeds and technologies, suggesting that evaluating policies and interventions with sensitivity to gender, species, and location will improve their effectiveness. Overall, this research revealed that a wide diversity of under-studied ALV species is contributing to food security in important ways and that the potential exists to strengthen production, distribution chains, and markets further. Well-targeted research and investment could have a substantial impact in this area in improving sustainability and food security for people across sub-Saharan Africa.