

Plant nutrition has important consequences for plant-feeding insects. Nitrogen has long been thought to be the most important nutrient, however, recent theory related to the “stoichiometry” of plant nutrients suggests that phosphorus may play a more important role than nitrogen for many phytophagous insects. One of my major research interests is how the phosphorus content of plants affects juvenile survival and host selection behavior of plant-feeding pests and weed biological control agents. A current research project in my laboratory is testing the hypothesis that leaf phosphorus content affects the relative suitability and acceptability of invasive and native thistles to beetles used in the biological control of invasive thistles.