CHAPTER 12: PESTICIDE RESISTANCE

**Inherited ability** to avoid toxic effects when exposed to a particular pesticide

- Reduced **uptake** (cuticle, feeding habit)
- Metabolic resistance (metabolize)
- Target site **insensitivity** (organ, system)
- Behavior change (bait)
Factors in Resistance Development

- Proportion of resistant individuals in populations
- Portion exposed to pesticide
- Length of life cycle
- Diversity of pesticides
- Mode of action
- Persistence and frequency of use
Resistance Management

- Use IPM program
- Use pesticides only when needed
- Apply at labeled rate
- Rotate modes of action (on label)
  - Resistance Group numbers
  - Resistance Management Statements