





## **EXAMPLES OF ALTERNATIVES** (Alternatives to Restricted Materials)

### **Consider non-chemical alternatives**

- Beneficial insects/ Beneficial release; encourage natural predators/enemies.
- Set up owl boxes and raptor perches for vertebrate rodent control
- Learn to recognize common predators such as ladybugs, syrphid flies, and lacewings. If you see them in abundance, you may want to postpone any treatments to see if these natural enemies will solve problems for you.
- Mating disruption, parasitoids, microscopic pathogens.
- Bacillus Thuringiensis (Bt)
- Sanitation (remove unpicked fruit, mummy nuts, weeds, dead limbs, etc.)

### **Consider Manual Alternatives**

- Mowing, discing, or hoeing to cut up weeds.
- Use of weed burners/flame weeding.
- Trapping to control rats, mice, voles, moles, gophers, and certain insects.
- Cover crop/mulching to reduce weed growth.

### **Consider the Use of Physical Controls and Exclusion**

- Fabric row covers exclude insects and birds.
- Weed control fabric suppresses weeds.

### **Consider Cultural Controls**

- Choose proper plants for the climate.
- Choose plants for pest and disease resistance.

## **EXAMPLES OF MITIGATION** (Reducing the adverse effects of Restricted Materials)

### **Use Less Pesticide**

- Use pesticides in “spot” treatments, where and when they are needed.
- Insect trapping to determine insect pressure.

### **Use Proper Timing**

- Regular monthly or bi-monthly spraying wastes pesticides. In addition, during many of these treatments, pests may not be present or present in numbers so small that they are not causing significant problems.
- For some pests, treatments must be timed to coincide with a period in their lives when they are most vulnerable.
- Use of preemergent to reduce repeated green sprays of hard to control weeds.
- Treat weeds when small to use less material.

### **Use Integrated Pest Management (IPM)**

- Determine the number of pests that can be tolerated without causing unacceptable damage or annoyance. Pests are treated only when they reach that level (Economic Threshold).

### **Use Less Toxic Pesticides**

- Non-restricted pesticide products, certified organic, or FIFRA section 25(b) exempt/minimum risk pesticide products.

### **Use of Application Technology**

- Selection of application equipment to minimize drift of restricted materials
- Airplane vs. helicopter vs. ground sprayer should be considered based on the crop, coverage needed, and weather conditions.