Suggested Best Management Practices for Orchard Spaying

By: Lynn Long
OSU Wasco County Horticultural Agent

Cultural Practices

Maintain a minimum of 20 feet between orchards and waterways including streams and ponds.

Decrease runoff that might contain pesticides by planting and maintaining cover crops to increase water penetration and intercept runoff.

Mixing and Loading

Mix and load sprayers in areas where runoff cannot occur. Maintain an air gap between filler pipes and sprayers to reduce backflow.

Rinse pesticide containers when filling sprayers and mix rinsate back into spray tank. Store rinsed plastic containers away from waterways and recycle, do not burn.

Do not overfill sprayers. Use anti-foaming agents to reduce the risk of spillage.

Apply spray-tank rinse water back into the orchard; do not drain it in one spot.

Clean up spills immediately. Have spill absorbent material (cat litter, sawdust, etc.) available when mixing and loading.

Maintenance & Calibration

Maintain and service equipment on a regular basis to avoid leaks, especially valves and hoses.

Calibrate sprayers to avoid over-application and reduce drift.

Application

Minimize drift to waterways by increasing droplet size, using drift retardant, and avoiding application in high winds.

Turn off nozzles at the end of each tree row.

Make all efforts to eliminate drift near the edge of the orchard. When spraying rows parallel to sensitive areas spray only the outside of the outer two rows. Spray inwards at a lower speed for improved coverage. When spraying rows perpendicular to sensitive areas turn off nozzles two to three trees from end of each row. Then return to spray the last two to three trees inwards at a lower speed.

Apply dormant sprays with a minimum of 200 gallons of water per acre for increased droplet size and reduced drift.

Spray sensitive areas in the lowest wind conditions. When winds die down, move to these areas before finishing the rest of the block.