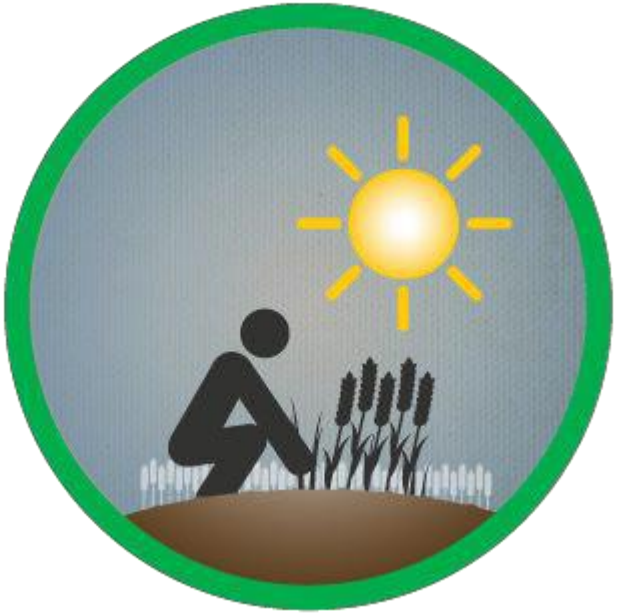
Container Management

The safe and responsible management of empty crop protection containers

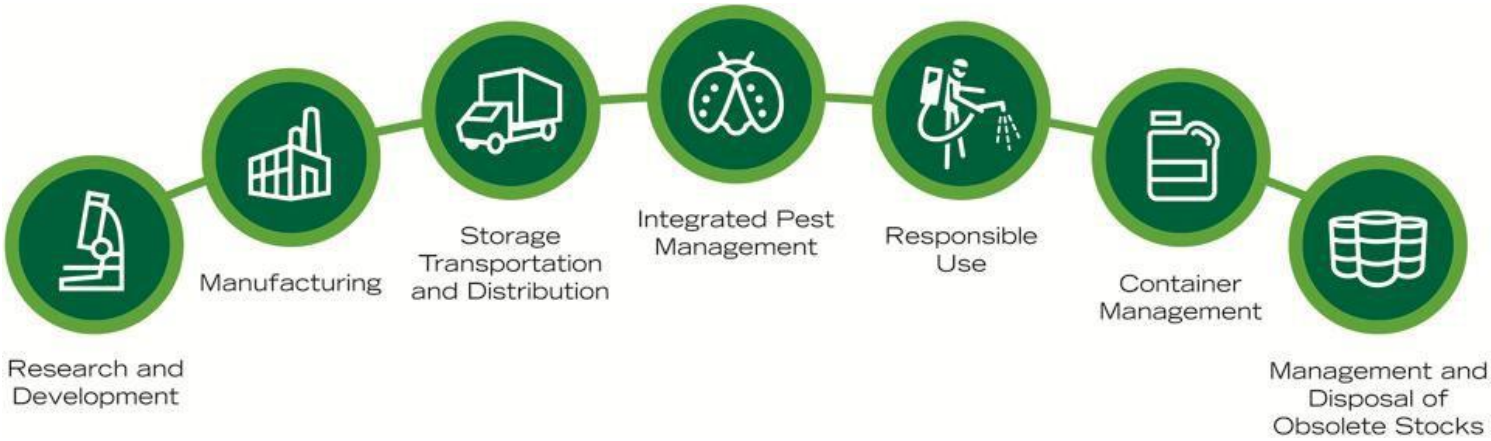
Benefits of Crop Protection Products

- Pesticides help farmers control the pests and diseases that threaten our global food supply
- Allow farmers to sustainably increase production
- Play a vital role in global agriculture



Crop Protection Stewardship

Promoting a life-cycle approach to product management across all stages from product development to use and ultimately appropriate disposal of product containers and obsolete stocks



Stewardship Vision 2020

- Crop protection industry is taking the lead to ensure safe and responsible management of empty crop protection containers worldwide
- Industry supports programs in over 40 countries
- Goal is to maximize the collection, recycling and proper disposal of all containers by 2020

Container Management

Program Objectives:

- Protect the environment and operator from pesticide exposure
- Appropriately treat and safely disposal of empty containers
- Reduce waste and maximize recycling
- Ensure compliance with local packaging requirements and legislation

Container Management

Program areas:

- **Research** and design of containers
- **Training** of distributors, retailers and end users
- Support funding, development and implementation of empty container **collection and recycling** options

Research & Design of Containers

- An important component of container management
- Pro-active approach: effective product design
  - Develop better, easier to handle and more environmentally sensitive packaging, as manufacturers can focus on preventing packaging waste at its source
- Past developments include:
  - small ready-to-use packs (suitable size for backpack sprayers)
  - multi-trip, returnable containers
  - one-way, single-trip containers made of recyclable materials



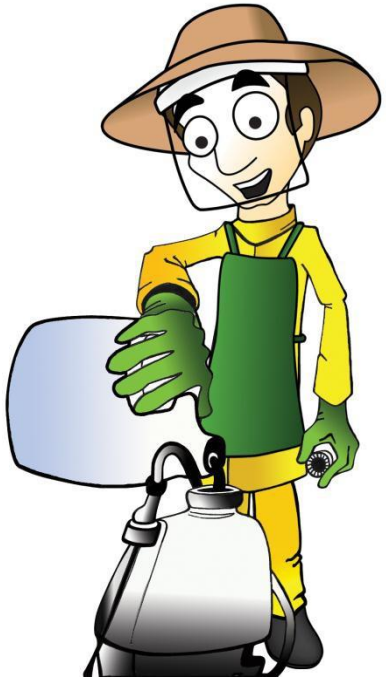

Training Programs

- Training programs for crop protection retailers, distributors and end users
- To raise awareness about proper container management
- To promote **triple rinsing** and recycling of empty containers
  - A validated method to prepare containers for proper disposal or recycling
  - Helps to protect farmer health and the environment

Training: Triple Rinsing

Preparation > Step 1 > Step 2 > Step 3

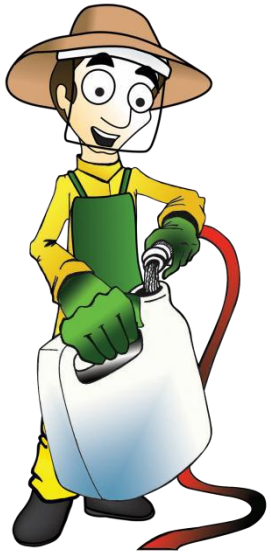
- Always wear **protective clothing**
- Empty all pesticides from the container by placing it upside down over the spray tank. Hold it there for 30 seconds or more.



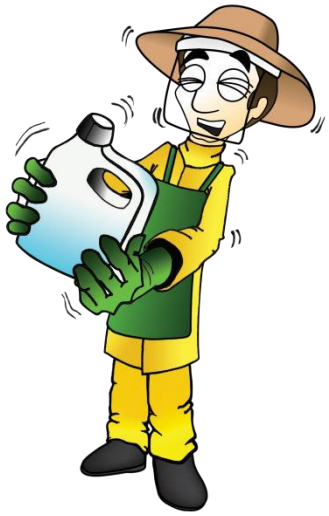
Training: Triple Rinsing

Preparation > **Step 1** > **Step 2** > **Step 3**

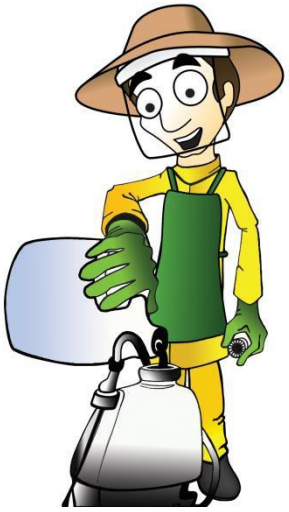
1) Quarter fill the container with water



2) Close the container and shake for 30 seconds



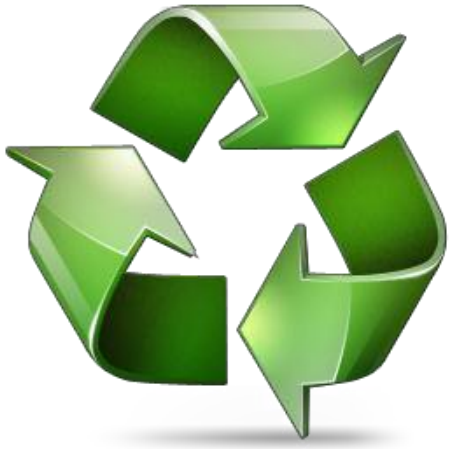
3) Empty the container by placing it upside down over the spray tank. Hold it there for 30 seconds or more.



Repeat all steps 3 times

Training: Triple Rinsing

- After rinsing, **puncture** the container so that it cannot be re-used
- Send to an approved **recycling** facility



- In areas where recycling is not yet an option, contact Croplife local industry for appropriate disposal alternatives

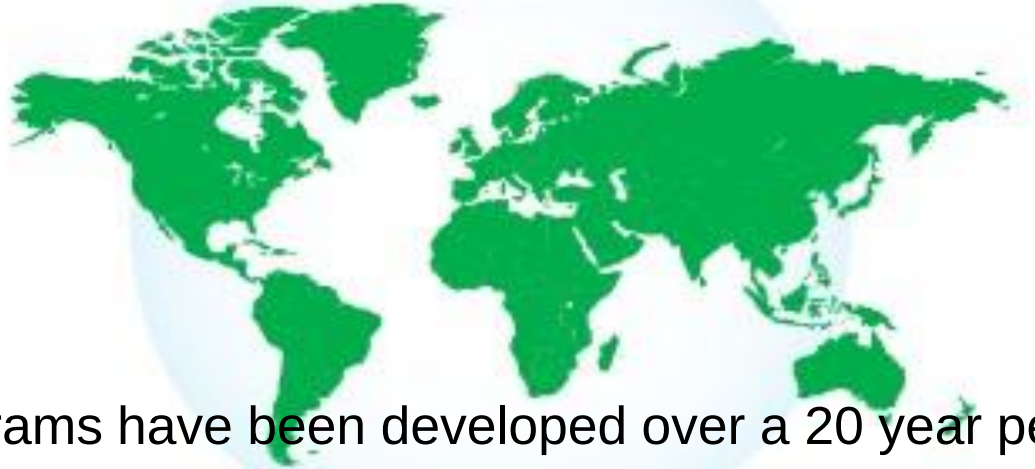
Collection and Recycling

- Crop protection industry supports programs that enable collection and recycling of properly rinsed containers

- Recycling can take a number of different approaches:
  - recycle through re-use of multi-trip containers, especially suitable for large container volumes
  - recycling of the material, especially plastics, into tested and recommended end uses
  - recovery of energy from containers, for example, thermal recovery in approved cement kilns

Programs Around the World

- The global CropLife network container management programs **collect and recycle** empty pesticide containers in **over 40 countries around the world**



  - Programs have been developed over a 20 year period and are often run in partnership between industry and government
  - There are more than 20 pilot programs and others in the beginning stages of development

Container Management Program Results

IN 2013 **83,000** METRIC TONS OF **PLASTIC WERE RECOVERED** THROUGH THESE PROGRAMS

USING 83,000 METRIC TONS OF RECYCLED PLASTIC VS. NEW PLASTIC:

SAVES
707,000 cubic meters of
landfill space
EQUIVALENT TO

SAVES
energy equal to
156 million liters of gasoline
EQUIVALENT TO
removing 28,500 cars
from the road per year

For more information, please contact

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